

DETAILED ACTION

Status of Claims

1. This action is responsive to amendment filed on June 13, 2008, where Applicant amended claims 1,9,18-21,24-26, cancelled claims 5-6,22-23, and added new claim 27. Claims 1-4,7-12,18-21,24-27 are pending examination.

Response to Arguments

2. Applicant's arguments filed 6/13/2008 have been fully considered but they are not fully persuasive.

3. The previous 112 first paragraph, 112 second paragraph, and 101 rejections are all withdrawn in view of amendments.

4. Applicant argues that Ghose does not teach the amended limitations which include “*an application program interface for generating a session and transmitting messages based on completion information associated with a queued set of messages awaiting transmission*”.

In reply, Applicants amendments seem to just reiterate the language that was originally presented in the claim. The amendments are interpreted broadly and are not seen to further limit the claim so as to overcome the reference. Regarding the limitation “*invoking an application programming interface...*”, Ghose does teach this. Ghose discloses that their invention is an application that interfaces with other software and maintains API compliance when performing connection setup (i.e. 3 way handshaking) and data transmission (column 9 lines 58-65, column 10 lines 31-37,56-60,66,67)

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Furthermore, regarding the limitation “*transmitting messages... based upon completion information associated with the queued set of messages stored in a queue at the data source*”, Ghose also teaches this. Ghose discloses that after messages are sent for the first time from the queue, messages remaining in the queue are transmitted based upon remaining credits (i.e. completion information) (column 15 lines 7-21).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 1, 7,10,12,18 & 24 rejected under 35 U.S.C. 102(e) as being anticipated by Ghose et al (US Patent No 7,305,486).**

7. In reference to claim 1, Ghose teaches a method for initiating the transmission of data, comprising:

establishing a connection from at least one data source to a destination (column 9 lines 53-56, Ghose discloses establishing a connection between two hosts);

generating at least one session to transmit data via the connection from the at least one data source to the destination (column 9 lines 53-56 and column 13 lines 61-64, Ghose discloses utilizing the connection for sending/streaming data (i.e. session)), wherein generating at least one session comprises invoking an application programming interface and receiving a session

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acceptance from the destination via the application programming interface (column 9 lines 58-65, column 10 lines 56-60,66,67, Ghose discloses that their invention is an application that interfaces with other software and maintains API compliance when performing connection setup (i.e. 3 way handshaking) and data transmission);

queuing a set of messages from the at least one session for transmission over the connection to the destination from the data source (column 13 line 62 – column 14 line 3, Ghose discloses depositing the data into a buffer (i.e. queue) within the sending host, to send it to a receiver); and

transmitting messages from the queued set of messages based upon completion information associated with the queued set of messages stored in a queue at the data source (column 14 lines 1-5 and column 15 lines 7-21, Ghose discloses transmitting the data to the receiver based upon available number of credits (i.e. completion information)).

8. In reference to claim 7, Ghose teaches a method according to claim 1, wherein the step of queuing a set of messages comprises a step of queuing the set of messages in at least one input/output buffer (column 13 line 64 – column 14 line 3).

9. In reference to claim 10, Ghose teaches a method according to claim 1, wherein the step of transmitting comprises a step of asynchronously transmitting messages from the queued set of messages (column 14 lines 1-5 and column 15 lines 7-21, Ghose discloses data is sent in intervals in accordance with the number of credits (i.e. asynchronously).

10. In reference to claim 12, Ghose teaches a method according to claim 1, wherein the step of transmitting comprises a step of transmitting via a transport layer (column 10 lines 34-38).

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11. In reference to claims 18 & 24, these claims correspond to the method claims of claims 1 & 5-7 respectively. Therefore, claims 18 & 24 are rejected based upon the same rationale as given for claims 1 & 5-7 above.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 2-4,11,19-21 & 26 rejected under 35 U.S.C. 103(a) as being unpatentable over Ghose et al (US Patent No 7,305,486) in view of Gilman et al (US Patent Publication No 2003/0079121).**

14. In reference to claim 2, Ghose teaches a method according to claim 1. Ghose fails to explicitly teach wherein the step of establishing a connection comprises a step of establishing a connection in a pipe. However, Gilman teaches secure end-to-end communication in a network by utilizing one of a variety tunneling protocols (i.e. pipe) which provide advanced security features for communication (Gilman, ¶s 29 & 30). It would have been obvious for one of ordinary skill in the art to modify Ghose wherein the step of establishing a connection comprises a step of establishing a connection in a pipe as per the teachings of Gilman for the purpose of providing advanced security features in end-to-end communications.

15. In reference to claim 3, Ghose teaches a method according to claim 1. Ghose fails to explicitly teach wherein the step of establishing a connection comprises a step of authenticating

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at least one of the at least one source and the destination. However, Gilman teaches dual authentication utilizing a secure VPN communication link between computers for guaranteeing non-tampering of transmitted data (Gilman, ¶ 26). It would have been obvious for one of ordinary skill in the art to modify Ghose wherein the step of establishing a connection comprises a step of authenticating at least one of the at least one source and the destination as per the teachings of Gilman for the purpose of creating a secure communication link between computers and for guaranteeing non-tampering of transmitted data.

16. In reference to claim 4, Ghose teaches a method according to claim 3, wherein the step of authenticating comprises a step of authenticating both the at least one source and the destination (Gilman, ¶ 26, see rationale for claim 3).

17. In reference to claim 11, Ghose teaches a method according to claim 1, wherein the step of transmitting comprises a step of transmitting encrypted messages from the queued set of messages. However, Gilman teaches encryption utilizing a secure VPN communication link between computers for guaranteeing non-tampering of transmitted data (Gilman, ¶ 26). It would have been obvious for one of ordinary skill in the art to modify Ghose wherein the step of transmitting comprises a step of transmitting encrypted messages from the queued set of messages as per the teachings of Gilman for the purpose of creating a secure communication link between computers and for guaranteeing non-tampering of transmitted data.

18. In reference to claims 19-21 & 26, these claims correspond to the method claims of claims 2-4 & 11 respectively. Therefore, claims 19-21 & 26 are rejected based upon the same rationale as given for claims 2-4 & 11 above.

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19. **Claims 8,9,25 rejected under 35 U.S.C. 103(a) as being unpatentable over Ghose et al (US Patent No 7,305,486) in view of Lucovsky et al (US Patent No 6223207).**

20. In reference to claim 8, Ghose teaches a method according to claim 1. Ghose fails to explicitly teach wherein the message completion information comprises results from a completion port operation of at least one of sending or receiving. However, Lucovsky teaches a completion port utilized for reporting the I/O completion status of a send/receive queue (Lucovsky, column 9 lines 42-51). It would have been obvious for one of ordinary skill in the art to modify Ghose wherein the message completion information comprises results from a completion port operation of at least one of sending or receiving as per the teachings of Lucovsky for the purpose of reporting the I/O completion status of a send/receive queue.

21. In reference to claim 9, Ghose teaches a method according to claim 8, further comprising a step of throttling message traffic in the at least one input/output buffer when the completion port is in a full state (Ghose, column 14 lines 1-5 and column 15 lines 7-21).

22. In reference to claim 25, this claim corresponds to the method claim of claim 8. Therefore, claim 25 is rejected based upon the same rationale as given for claim 8 above.

23. **Claim 27 rejected under 35 U.S.C. 103(a) as being unpatentable over Ghose et al (US Patent No 7,305,486).**

24. In reference to claim 27, Ghose teaches a method for transporting large data sets across a communication network, the method comprising:

establishing one or more sessions between a plurality of data sources and a storage server by transmitting session requests from output queues at each data source to a destination queue at

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the storage server and transmitting an acknowledgement that the session requests are accepted from the storage server to the data source (column 9 lines 58-65, column 10 lines 56-60,66,67, Ghose discloses performing connection setup (i.e. 3 way handshaking) and data transmission);

buffering data messages received from each data source at an assigned output queue until the assigned output queue is full (column 13 line 62 – column 14 line 3, Ghose discloses depositing the data into a buffer (i.e. queue) within the sending host, to send it to a receiver); transmitting the data messages to the destination queue at the storage server (column 14 lines 1-5);

receiving an acknowledgment receipt of the data messages received from each data source having a window size remaining at the destination queue; and transmitting additional data messages from the data sources to the destination queue at the storage server based on the window size included in the acknowledgment receipt (column 15 lines 7-21, Ghose discloses receiving credit installments and transmitting additional data based upon the size).

Ghose discloses a method of reliable data transport, but fails to explicitly teach that the receiver of the data is a "storage server". However, storage servers are old and well-known in the art. They are commonly used to enable users to perform operations such as backing-up data or uploading data for the purpose of sharing the data with multiple users across a network. It would have been obvious for one of ordinary skill in the art to modify Ghose by making the receiver as a storage server for the purpose of enabling reliable data transport to a storage server for the purpose of data backup or network data sharing.

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Conclusion

25. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the specified citations of the relied upon prior art, in the above rejections, are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and/or priority documents) is implied as being applied to teach the scope of the claims.

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RAMY M. OSMAN whose telephone number is (571)272-4008.

The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ramy M Osman/
Examiner, Art Unit 2157

September 15, 2008